

Application No. 10/648,641  
Amendment dated November 17, 2005  
Reply to Office Action of June 17, 2005

### **REMARKS/ARGUMENTS**

Responsive to the Official Action mailed June 17, 2005, applicants have amended the claims of their application in an earnest effort to place this case in condition for allowance. Specifically, claims 16 and 17 have been cancelled, and claims 1, 2, 15, and 20 amended. Reconsideration is respectfully requested.

As discussed in the Specification, the present invention is directed to an improved nonwoven fabric construct, which is particularly suited for cleaning applications, such as a facial cleaning product, wherein the nonwoven fabric includes a three-dimensional image formed by hydroentanglement on an associated three-dimensional image transfer device. By formation in this manner, the present nonwoven fabric is formed with a network of fibrous surface projections which extend from a fibrous support plane of the fabric. Notably, these surface projections are at least 25% of the thickness of the overall support plane, and are provided in a *wave-like form* to form *air passageways* parallel to the fibrous support plane.

It is respectfully submitted that a nonwoven fabric construct having this unique combination of features is neither taught nor suggested by the cited prior art.

By this response, dependent claims 16 and 17 have been cancelled, and therefore, the Examiner's rejection of these claims under 35 U.S.C. §112 can be withdrawn.

In connection with the Examiner's rejection of the claims under 36 U.S.C. §112, second paragraph, applicants have carefully revised claim 1 to address the points noted by the Examiner. Applicants note the Examiner's reference to *In Re: Thorpe* (citation omitted). In this regard, applicants respectfully refer to M.P.E.P. Section 2113, in which *In Re: Thorpe* is cited, with the M.P.E.P. further specifically requiring:

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The structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where the product can only be defined by the process steps by which the product is formed, or *where the manufacturing process steps would be expected to distinctive structural characteristics to the final product* (citation omitted).

In this regard, it is respectfully noted that only applicants' own disclosure teaches formation of a three-dimensional imaged nonwoven fabric construct having the unique combination of structural features which facilitate its use for cleaning applications.

The Examiner will note that claim 20 has been revised in response to Paragraph 5 of his Action.

By this response, applicants submit herewith a Terminal Disclaimer, referencing commonly-owned U.S. Patent No. 6,695,429. It is therefore believed that this double-patenting rejection can now be withdrawn.

The Examiner will note that referenced U.S. patent publication No. 2001/0055926, to Fereshtekhou et al. is not commonly owned. However, as discussed below, it is respectfully maintained that the presently pending claims are clearly patentably distinct from this reference.

In the Action, the Examiner has objected to the pending claims under 35 U.S.C. §102(e), with reliance upon the Carter et al. patent. This rejection is respectfully traversed. In accordance with the provisions of 35 U.S.C. §103(c), applicants hereby state that the subject matter of the Carter et al. patent, and their claimed invention, were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person.

It is respectfully submitted that the presently pending claims are clearly distinct from the Carter et al. reference. In particular, Carter et al. does not disclose the formation of a three-dimensional image comprising fibrous surface projections, extending from a fibrous support plane, wherein the fibrous surface projections are at least 25% of the thickness of the overall support plane. Applicants' note the Examiner's reference to Figures 2-7, and 9-12 of Carter et al., but it is respectfully maintained that this claimed feature of applicant's novel nonwoven fabric construct is not disclosed in Carter et al. Accordingly, this rejection should be withdrawn.

In the Action, the Examiner has rejected the pending claims under 35 U.S.C. §102, with reliance upon the Fereshtekhou et al. publication. This rejection is respectfully traversed.

It is respectfully submitted that this reference is clearly deficient in at least several different respects in teaching or suggesting the present invention as claimed.

First, there is no teaching or suggestion in this reference of forming a three-dimensionally imaged nonwoven fabric by use of a *three-dimensional image transfer device*, in accordance with the present invention. As noted at page 4 of applicants' Specification, such a three-dimensional image transfer device can be configured in accordance with U.S. Patent No. 5,098,764, incorporated by reference. There is no such teaching or suggestion in the cited publication. Rather, this reference is specifically limited in its teachings to the formation of material on a "forming belt" comprising "mesh" of polyester filaments of 0.24 inches in diameter (see Paragraph 0062). As will be recognized by those skilled in the art, this type of "mesh belt" typically woven, is like conventional mesh screens and the like, which *do not* impart three-dimensionality to an imaged fabric in accordance applicants' disclosure, and in accordance with applicants' claims.

Moreover, the Fereshtehkhrou et al. publication fails to teach formation of "wave-like" surface projections, in accordance with applicants' claims. In this regard, those skilled in the art will understand the term "wave-like" to constitute generally *continuous* undulations or like structures, consistent with the typical definition of "wave", that is, one or more of a series of ridges, such as across water or the like.

In significant distinction, the cited publication specifically refers to the formation of "discontinuous regions" (Paragraph 0059) and in fact, in Figure 3, illustrates such "discontinuous regions". In the Action, the Examiner refers to Figure 4 as illustrating "the wave-like form", but this is an incorrect interpretation of this illustration. Figure 4 is a *cross-sectional illustration*, of what are otherwise described as "discontinuous regions". Clearly, this reference fails to teach or suggest the formation of "wave-like fibrous projections" as claimed.

This publication is further deficient in teaching or suggesting applicants' claimed fabric structure, wherein the fibrous surface projections are at least 25% of the thickness of the overall support plane. In this regard, the Examiner references Paragraph 0060 of the publication which states:

With regard to caliper differences, it is preferred that the caliper difference between the discontinuous regions and the continuous region is at least 25%.

What does this mean, and how does it teach applicants' claimed structure? Clearly, this does not teach or suggest applicants' explicitly stated structural configuration of the claimed wave-like fibrous projections.

Accordingly, the rejection based upon the Fereshtehkhrou et al. publication should be withdrawn.

In the Action, the Examiner has further relied upon this publication, in combination with U.S. Patent No. 5,369,858, to Gilmore et al. in rejecting the presently pending claims under 35 U.S.C. §103. However, even when combined, these references clearly fail to teach or suggest applicants' novel imaged nonwoven fabric construct, and accordingly, the rejection is respectfully traversed.

First, like the Fereshtekhou et al. publication, Gilmore et al. fails to teach or suggest a three-dimensionally imaged nonwoven fabric formed on a three-dimensional image transfer device, in accordance with applicants' disclosed method and claims. This is evident from the discussion in the Gilmore et al. reference, wherein it is stated:

The wire or screen generally suitable for use as the aperturing member in the present invention may be of the type disclosed in "Forming Wires For Hydroentanglement Systems", *Nonwovens Industry*, 1988, pp. 39-43, Widen, et al., and U.S. Patent No. 3,485,70, to Evans. *These screens may be woven from metal filaments or from filaments of thermoplastic polymers such as polyester or nylon* (column 8, lines 15-23).

Thus, like the Fereshtekhou et al. publication, Gilmore et al. specifically fails to teach or suggest formation of a three-dimensional imaged fabric in accordance with the present invention.

Applicants respectfully disagree with the Examiner's interpretation that Gilmore et al. illustrates "wave-like" surface projections. As noted, those skilled in the art would clearly understand that the recited wave-like projections are intended to be of a substantially continuous nature, *and define air passageways*. Clearly, those skilled in the art *would not* consider the grid-like pattern of the fabric formed in accordance with Gilmore et al. (see Fig.

5A) to be either "wave-like" or to "define air passageways". Thus, this reference further fails to teach or suggest applicants' invention, as claimed.

The Examiner states, in Paragraph 23 of the Action, that the "Examiner equates the polypropylene meltblown fibers of Example 1 to Applicant['s] hydrophobic melt additive as said fibers are hydrophobic and meltblown". Applicants respectfully submit that this is an improper reading of the Gilmore et al. reference. Claim 5 specifies *staple length fibers*, which include melt additives therein, as further specified in claim 6. As will be recognized by those familiar with the art, "meltblown fibers" *are not* staple length fibers. Nor are "meltblown fibers" a "melt additive" to staple length fibers. This rejection should be withdrawn.

In connection with claim 15, it is respectfully noted that "pre-entanglement" prior to imaging, enhances fabric integrity, and also enhances fabric imaging. In view of the clear absence in the teachings of the prior art of forming a three-dimensional image nonwoven fabric, as claimed, the prior art clearly cannot teach or suggest the subject matter of claim 15.

In connection with claims 20 and 21, both of the relied-upon references clearly fail to teach or suggest applicants' claimed structure of wave-like fibrous projections, and associated air passageways. Accordingly, applicants must respectfully maintain the prior art *does not* "meet this structural and compositional limitations".

In the Action, the Examiner acknowledges that Gilmore et al. fails to teach applicants' claimed structural relationship of the recited fibrous surface projections, wherein the surface projections are at least 25% of the thickness of the overall support claim. As noted above, such a structural relationship *is not* taught by the secondary Fereshtekhou et al. reference.

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In the Action, the Examiner has further rejected the pending claims under 35 U.S.C. §103, with reliance upon commonly-owned U.S. patent publication No. 2003/0104745, to Curtis et al., in view of the Fereshtekhou et al. reference.

In accordance with the provisions of 35 U.S.C. §103(c), applicants hereby state that the subject matter of Curtis et al. and their claimed invention were, at the time their claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person. Accordingly, this rejection can be withdrawn.

In view of the foregoing, formal allowance of claims 1-14, and 17-21 is believed to be in order and is respectfully solicited. Should the Examiner wish to speak with applicants' attorneys, they may be reached at the number indicated below.

The Commissioner is hereby authorized to charge any additional fees which may be required in connection with this submission to Deposit Account No. 23-0785.

Respectfully submitted,

By   
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I hereby certify that this paper is being deposited with the United States Postal Service with sufficient postage at First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on **November 17, 2005**.

  
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